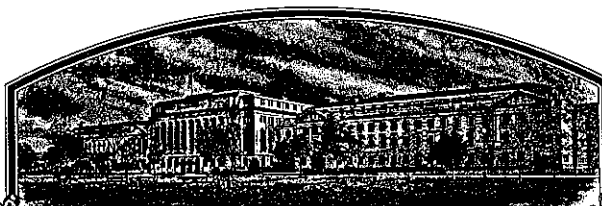


No.

8600008



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Prairie Seed Company, Inc.**

Whereas, THERE HAS BEEN PRESENTED TO THE

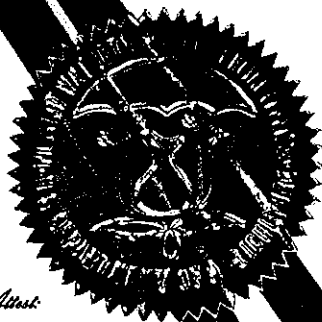
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Sanalona'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D. C. this 30th day of June in the year of our Lord one thousand nine hundred and eighty-six.

Attest:

*Kenneth A. Erwin*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Richard E. Lyng*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

APPROVAL EXPIRES 4-30-85

FORM APPROVED: OMB NO. 0581-0055

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Prairie Seed Company, Inc.		2. TEMPORARY DESIGNATION Sanalona		3. VARIETY NAME Same	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P. O. Box 781 West Point, MS. 39773		5. PHONE (Include area code) 601-494-3533		FOR OFFICIAL USE ONLY PVPO NUMBER 8600008	
6. GENUS AND SPECIES NAME Glycine Max L.		7. FAMILY NAME (Botanical) Legumindseae		FILING DATE 10/21/85 TIME 10:00 <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.	
8. KIND NAME Soybean		9. DATE OF DETERMINATION July 28, 1984		FEE RECEIVED AMOUNT FOR FILING \$ 1,800 DATE 10/21/85	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation				AMOUNT FOR CERTIFICATE \$ 200. DATE June 2, 1986	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Mississippi				12. DATE OF INCORPORATION December 1979	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Robert F. Brand P. O. Box 781 West Point, MS. 39773 PHONE (Include area code): 601-494-3533					
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED					
a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)					
b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement.					
c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety (Request form from Plant Variety Protection Office.)					
d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety.					
e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership.					
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) <input type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input checked="" type="checkbox"/> No					
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> Foundation <input type="checkbox"/> Registered <input type="checkbox"/> Certified		
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? <input type="checkbox"/> Yes (If "Yes," give date) <input checked="" type="checkbox"/> No Not prior to this date					
19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT Robert F. Brand				DATE October 18, 1985	
SIGNATURE OF APPLICANT				DATE	

## SOYBEAN

## "Sanalona"

## 14a Exhibit A: Origin and Breeding History

Sanalona came from a cross made in 1968 by Dr. Celio Barrya of Hood X Lee.

Early generations were evaluated at the Oregon Agricultural Experiment Station and the Research Station in Culiacan, Mexico. The evaluations were made by Dr. Barrya and Dr. Hector Lopez Garzia.

Sanalona is an increase from a line in the F<sub>8</sub> generation from the Hood X Lee cross.

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SOYBEAN

"Sanalona"

14a Exhibit A: Origin and Breeding History

This variety has been in our possession for five (5) years starting in 1981. We have observed this variety's growth and characteristics over these five generations.

We have observed an occasional plant (about 1 in 60,000) plants that are stockier, lesser number of leaves, larger-stemmed, and set only a few pods with 1-2 seeds each.

We consider this a recurrent mutation that is of no consequence since so few seed are produced per plant. We have not observed an increase in percentage of such plants over the five generations.



SOYBEAN

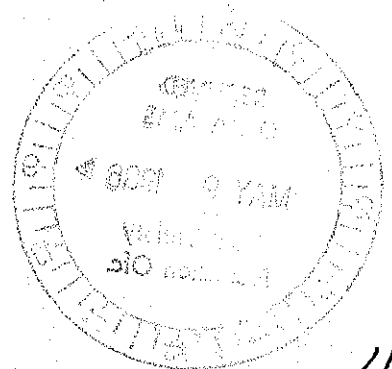
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"Sanalona"

14b Exhibit B, Novelty Statement

Sanalona is most similar to Tracy-M. Sanalona differs from Tracy-M as follows:

1. Sanalona seed is slightly smaller.  
(see section 23)
2. Sanalona has a brown hilum and Tracy-M has a black hilum.
3. Sanalona has a purple bloom and Tracy-M has a white bloom.



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN & SEED DIVISION  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Prairie Seed Company, Inc.	TEMPORARY DESIGNATION Sanalona	VARIETY NAME Same
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) P. O. Box 781 West Point, MS. 39773		FOR OFFICIAL USE ONLY PVPO NUMBER 8600008

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,   ).

## 1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)  
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)  
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

## 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow

2 = Green

3 = Brown

4 = Black

5 = Other (Specify) \_\_\_\_\_

## 3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton')

2 = Shiny ('Nebsoy'; 'Gasoy 17')

## 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

## 5. HILUM COLOR: (Mature Seed)

1 = Buff

2 = Yellow

3 = Brown

4 = Gray

5 = Imperfect Black

6 = Black

7 = Other (Specify) \_\_\_\_\_

## 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow

2 = Green

## 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low

2 = High

## 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)2 = Type B (SP1<sup>b</sup>)

## 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')

2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')

3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')

4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

## 10. LEAFLET SHAPE:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Specify) \_\_\_\_\_

## 11. LEAFLET SIZE:

☒ 2

1 = Small ('Amsoy 71'; 'A5312')

3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

## 12. LEAF COLOR:

☒ 3

1 = Light Green ('Weber'; 'York')

3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

## 13. FLOWER COLOR:

☒ 2

1 = White

2 = Purple

3 = White with purple throat

## 14. POD COLOR:

☒ 1

1 = Tan

2 = Brown

3 = Black

## 15. PLANT PUBESCENCE COLOR:

☒ 2

1 = Gray

2 = Brown (Tawny)

## 16. PLANT TYPES:

☒ 3

1 = Slender ('Essex'; 'Amsoy 71')

3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

## 17. PLANT HABIT:

☒ 1

1 = Determinate ('Gnome'; 'Braxton')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

2 = Semi-Determinate ('Will')

## 18. MATURITY GROUP:

☒ V ☒ I

1 = 000

2 = 00

3 = 0

4 = I

5 = II

6 = III

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

## 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

## BACTERIAL DISEASES:

☒ 2Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)☒ 1Bacterial Blight (*Pseudomonas glycinea*)☒ 2Wildfire (*Pseudomonas tabaci*)

## FUNGAL DISEASES:

☒ 0Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)☒ 0

Race 1

☐

Race 2

☐

Race 3

☐

Race 4

☐

Race 5

☐

Other (Specify)

☒ 2Target Spot (*Corynespora cassiicola*)☒ 0Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☒ 0Powdery Mildew (*Microsphaera diffusa*)☒ 2Brown Stem Rot (*Cephalosporium gregatum*)☒ 0Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

## 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

## FUNGAL DISEASES: (Continued)

<input checked="" type="checkbox"/> 2	Pod and Stem Blight ( <i>Diaporthe phaseolorum</i> var; <i>sojae</i> )						
<input checked="" type="checkbox"/> 2	Purple Seed Stain ( <i>Cercospora kikuchii</i> )						
<input checked="" type="checkbox"/> 2	Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )						
Phytophthora Rot ( <i>Phytophthora megasperma</i> var. <i>sojae</i> )							
<input type="checkbox"/> 0	Race 1	<input type="checkbox"/> Race 2	<input type="checkbox"/> Race 3	<input type="checkbox"/> Race 4	<input type="checkbox"/> Race 5	<input type="checkbox"/> Race 6	<input type="checkbox"/> Race 7
<input type="checkbox"/> Race 8	<input type="checkbox"/> Race 9	<input type="checkbox"/> Other (Specify) _____					

## VIRAL DISEASES:

<input type="checkbox"/> 0	Bud Blight (Tobacco Ringspot Virus)
<input type="checkbox"/> 0	Yellow Mosaic (Bean Yellow Mosaic Virus)
<input type="checkbox"/> 0	Cowpea Mosaic (Cowpea Chlorotic Virus)
<input type="checkbox"/> 0	Pod Mottle (Bean Pod Mottle Virus)
<input type="checkbox"/> 0	Seed Mottle (Soybean Mosaic Virus)

## NEMATODE DISEASES:

Soybean Cyst Nematode ( <i>Heterodera glycines</i> )								
<input checked="" type="checkbox"/> 1	Race 1	<input checked="" type="checkbox"/> 1	Race 2	<input checked="" type="checkbox"/> 1	Race 3	<input checked="" type="checkbox"/> 1	Race 4	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> 0	Lance Nematode ( <i>Hoplolaimus Colombus</i> )							
<input type="checkbox"/> 0	Southern Root Knot Nematode ( <i>Meloidogyne incognita</i> )							
<input type="checkbox"/> 0	Northern Root Knot Nematode ( <i>Meloidogyne Hapla</i> )							
<input type="checkbox"/> 0	Peanut Root Knot Nematode ( <i>Meloidogyne arenaria</i> )							
<input type="checkbox"/> 0	Reniform Nematode ( <i>Rotylenchulus reniformis</i> )							
<input type="checkbox"/>	OTHER DISEASE NOT ON FORM (Specify): _____							

## 20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input checked="" type="checkbox"/> 2	Iron Chlorosis on Calcareous Soil
<input type="checkbox"/>	Other (Specify) _____

## 21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="checkbox"/> 0	Mexican Bean Beetle ( <i>Epilachna varivestis</i> )
<input type="checkbox"/> 0	Potato Leaf Hopper ( <i>Empoasca fabae</i> )
<input type="checkbox"/>	Other (Specify) _____

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Tracy-M	Seed Coat Luster	Lee
Leaf Shape	Tracy-M	Seed Size	Lee
Leaf Color	Lee	Seed Shape	Lee
Leaf Size	Lee	Seedling Pigmentation	Lee



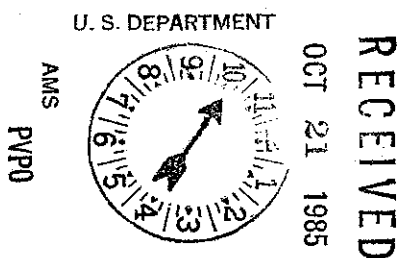
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## 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
Submitted	150	Medium	96.52	8.1	12.6	*44.48	14.32	12.5/100	2.5
Tracy-M Name of Similar Variety	155	Medium	96.52	8.1	12.6	*44.4	15.3	14.2/100	2.5

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM: \* 0 basis

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.



8

13D. Exhibit D. Additional Description of 'Sanalona'

Sanalona is a determinate soybean, Glycine max L.

Sanalona will flower about three days later than Tracy M. Sanalona will have a purple flower and Tracy M will have a white flower.

Sanalona in field observation at West Point, Mississippi has demonstrated good resistance to stem canker.

Sanalona is similar to Tracy M in yield comparision.

Sanalona has averaged 96 cm in height at West Point, Mississippi, the same as Tracy M.

Sanalona seeded May 10 at West Point, Mississippi and will reach maturity date October 5, about five days earlier than Tracy M.

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SOYBEAN

"Sanalona"

14e Exhibit E: Statement of the Basis of Applicant's Ownership

Referring to Exhibit A, seed of this soybean were secured from Dr. Hector Lopez Garzia. It is an increase from a line in the F<sub>8</sub> generation from the Hood X Lee cross made by Dr. Celio Barrya in 1968 in the program of Dr. E. E. Hartwig at the Delta Branch Experiment Station in Stoneville, Mississippi.

Dr. Hector Lopez Garzia is deceased. We have talked with Dr. Hartwig and he has encouraged us to proceed with the development of the soybean variety.

